

PATENT COOPERATION TREATY
PCT
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 23063PCT	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/AU2004/001054	International filing date (<i>day/month/year</i>) 9 August 2004	Priority date (<i>day/month/year</i>) 8 August 2003	
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ H03M 13/47; H04B 7/14			
Applicant CLIPSAL INTEGRATED SYSTEMS PTY LTD et al			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p style="margin-left: 20px;"><input type="checkbox"/> Box No. II Priority</p> <p style="margin-left: 20px;"><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Box No. IV Lack of unity of invention</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p style="margin-left: 20px;"><input type="checkbox"/> Box No. VI Certain documents cited</p> <p style="margin-left: 20px;"><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p style="margin-left: 20px;"><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 8 June 2005		Date of completion of the report 17 June 2005	
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929		Authorized Officer BEN TUOHY Telephone No. (02) 6283 7918	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2004/001054

Box No. I **Basis of the report**

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1 (b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

☒ the international application as originally filed/furnished

☐ the description:

pages as originally filed/furnished

pages* received by this Authority on with the letter of

pages* received by this Authority on with the letter of

☐ the claims:

pages as originally filed/furnished

pages* as amended (together with any statement) under Article 19

pages* received by this Authority on with the letter of

pages* received by this Authority on with the letter of

☐ the drawings:

pages as originally filed/furnished

pages* received by this Authority on with the letter of

pages* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

* If item 4 applies, some or all of those sheets may be marked "superseded."

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:

- ☐ complied with.
- ☒ not complied with for the following reasons:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are two inventions:

1. Claims 1 – 41, 43 – 46, 48 – 50 and 52 – 60 are directed to a radio communications system including data frames coded so as to be perceived by the device receiving the data frame, as a collision when the device is already receiving data from another source. It is considered that the detection of a collision comprises a first "special technical feature".
2. Claims 42, 47 and 51 are directed to a radio communications system including at least two transceivers and a repeater located intermediate the transceivers such that upon receipt of a data transmission from a first transceiver, the repeater re-transmits the data transmission from the first transceiver. It is considered that a repeater located intermediate the transceivers such that upon receipt of a data transmission from a first transceiver, the repeater re-transmits the data transmission from the first transceiver comprises a second "special technical feature".

Since the above mentioned groups of claims do not share either of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

4. Consequently, this report has been established in respect of the following parts of the international application:

- ☒ all parts.
- ☐ the parts relating to claims Nos.

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 1 – 60	YES
	Claims None	NO
Inventive step (IS)	Claims 1 – 60	YES
	Claims None	NO
Industrial applicability (IA)	Claims 1 – 60	YES
	Claims None	NO

2. Citations and explanations (Rule 70.7)

Documents cited for the purpose of compiling this report:

(D1) JP 2001-231078 A (NIPPON TELEGRAPH & TELEPHONE CORP.) 24 August 2001, see whole document (English translation sourced from JP web site: <http://www19.ipdl.jpo.go.jp/PA1/cgi-bin/PA1INIT?>); and

(D2) US 5040175 A

(D3) WO 2004/034310 A2

NOVELTY (N) and INVENTIVE STEP (IS) claims 1 - 60

Claims 1 – 41, 43 – 46, 48 – 50 and 52 – 60 are novel and inventive in light of the cited prior art documents D1 – D3 that do not, either alone or in obvious combination, disclose all of the features defined in the claims. In particular none of the documents either disclose or obviously suggest to a person skilled in the art the defined feature of a data frame used in a radio frequency communications network including data that is coded so as to be perceived by a device receiving the data frame, as a collision when the device is already receiving data from another source or the use of a fourth time slot for transmitting a collision indication.

Claims 42, 47 and 51 are novel and inventive in light of the cited prior art documents D1 – D3 that do not, either alone or obvious combination, disclose all of the features defined in the claims. In particular none of the documents either disclose or obviously suggest to a person skilled in the art the defined feature of a radio communications system including a repeater that upon receiving data from one of either a first or second transceiver, in a first time slot, transmits a repeater flag in a second time slot, and then in a third time slot transmits the data received in the first time slot.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001054

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
WO	2004034310	US	2004130438
JP	2001231078		
US	5040175	EP	0452124
		JP	5316113
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.			
END OF ANNEX			

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